

# STIC Search Report

## Biotech-Chem Library

STIC Database Tracking Number: 151229

TO: Phyllis Spivack  
Location: rem/3c70  
Art Unit: 1614  
Thursday, April 21, 2005

10460

Case Serial Number: 10/721022

From: Deirdre Arnold  
Location: Biotech-Chem Library  
REM 1A64  
Phone: 571-272-2532

Deirdre.Arnold@uspto.gov

### Search Notes

#### Litigation

\*\*\*Please verify that the correct patent number was searched (the patent number given on your request does not match the application number). If the wrong patent number was searched, please contact me ASAP.\*\*\*

*Please feel free to contact me if you have any questions or would like to amend the search.*

Thank you for using STIC services.

Regards,  
Deirdre Arnold

*Amended*



Reissue

Access DB# 151229

# SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: P Spivack Examiner #: 70400 Date: 4/20/05  
Art Unit: 1614 Phone Number: 20585 Serial Number: 101721022  
Mail Box and Bldg/Room Location: 3070 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*  
Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: carbazole Compounds tx CHF  
Inventors (please provide full names): Lukas-Laskey, Mary Ann  
Ruffolo, Robert  
Earliest Priority Filing Date: \_\_\_\_\_

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please do litigation search on

Patent 5,902, <sup>8</sup>~~821~~ ←  
08/875603

doesn't  
match  
application  
number

RECEIVED  
APR 20 2005  
STIC

Thanks

## STAFF USE ONLY

Searcher: Arnold  
Searcher Phone #: 2252  
Searcher Location: \_\_\_\_\_  
Date Searcher Picked Up: 4/20/05  
Date Completed: 4/21/05  
Searcher Prep. / Review Time: \_\_\_\_\_  
Clerical Prep. Time: \_\_\_\_\_  
Online Time: \_\_\_\_\_

## Type of Search

NA Sequence (#) \_\_\_\_\_  
AA Sequence (#) \_\_\_\_\_  
Structure (#) \_\_\_\_\_  
Bibliographic \_\_\_\_\_  
Litigation ☒ \_\_\_\_\_  
Fulltext \_\_\_\_\_  
Patent Family \_\_\_\_\_  
Other \_\_\_\_\_

## Vendors and cost where applicable


STN \_\_\_\_\_  
Dialog \_\_\_\_\_  
Questel/Orbit \_\_\_\_\_  
Dr. Link \_\_\_\_\_  
Lexis/Nexis \_\_\_\_\_  
Sequence Systems \_\_\_\_\_  
WWW/Internet \_\_\_\_\_  
Other (specify) \_\_\_\_\_

**Lexis.com History**  
04/20/2005[Return to History](#)

Sorted by Date

Activities	# Docs	Source	Client ID	Date
5,902,821 or 5902821	0	News, All (English, Full Text)		04/20/2005 16:00:05
5,902,821 or 5902821	0	Patent, Trademark & Copyright Periodicals, Combined		04/20/2005 15:59:24
5,902,821 or 5902821	0	Patent Cases from Federal Courts and Administrative Materials		04/20/2005 15:59:06
patno=5902821	1	Utility, Design and Plant Patents		04/20/2005 15:56:19
re38,027 or re38027	0	News, All (English, Full Text)		04/15/2005 08:42:53
re38,027 or re38027	0	Patent, Trademark & Copyright Periodicals, Combined		04/15/2005 08:42:17
re38,027 or re38027	0	Patent Cases from Federal Courts and Administrative Materials		04/15/2005 08:42:04
5,643,569 or 5643569	1	News, All (English, Full Text)		04/15/2005 08:38:25
5,643,569 or 5643569	0	Patent, Trademark & Copyright Periodicals, Combined		04/15/2005 08:37:56
5,643,569 or 5643569	0	Patent Cases from Federal Courts and Administrative Materials		04/15/2005 08:37:39
patno=5643569	1	Utility, Design and Plant Patents		04/15/2005 08:34:55
6642240 or 6,642,240	0	News, All (English, Full Text)		04/12/2005 13:31:27
6642240 or 6,642,240	0	Patent, Trademark & Copyright Periodicals, Combined		04/12/2005 13:30:48
6642240 or 6,642,240	0	Patent Cases from Federal Courts and Administrative Materials		04/12/2005 13:30:25
patno=6642240	1	Utility, Design and Plant Patents		04/12/2005 13:26:57
6,403,327 or 6403327	0	News, All (English, Full Text)		04/12/2005 09:25:02
6,403,327 or 6403327	0	Patent, Trademark & Copyright Periodicals, Combined		04/12/2005 09:24:35
6,403,327 or 6403327	0	Patent Cases from Federal Courts and Administrative Materials		04/12/2005 09:24:11
patno=6403327	1	Utility, Design and Plant Patents		04/12/2005 09:20:54
6,441,026 or 6441026	1	News, All (English, Full Text)		04/01/2005 12:16:16
6,441,026 or 6441026	0	Patent, Trademark & Copyright Periodicals, Combined		04/01/2005 12:15:24
6,441,026 or 6441026	0	Patent Cases from Federal Courts and Administrative Materials		04/01/2005 12:15:01
patno=6441026	1	Utility, Design and Plant Patents		04/01/2005 12:10:48
6407086 or 6,407,086	0	News, All (English, Full Text)		03/28/2005

			11:01:15
6407086 or 6,407,086	0	Patent, Trademark & Copyright Periodicals, Combined	03/28/2005 11:00:39
6407086 or 6,407,086	0	Patent Cases from Federal Courts and Administrative Materials	03/28/2005 11:00:15
patno=6407086	1	Utility, Design and Plant Patents	03/28/2005 10:56:43
6,127,155 or 6127155	1	News, All (English, Full Text)	03/23/2005 09:04:31
6,127,155 or 6127155	0	Patent, Trademark & Copyright Periodicals, Combined	03/23/2005 09:03:53
6,127,155 or 6127155	0	Patent Cases from Federal Courts and Administrative Materials	03/23/2005 09:03:29
patno=6127155	1	Utility, Design and Plant Patents	03/23/2005 09:00:07

Source: [Legal](#) > [Area of Law - By Topic](#) > [Patent Law](#) > [Patents](#) > [U.S. Patents](#) > [Utility, Design and Plant Patents](#)   
Terms: **patno=5902821** ([Edit Search](#))

875603 (08) 5902821 May 11, 1999

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

**5902821**

[Access PDF of Official Patent \\*](#)

[Check for Patent Family Report PDF availability \\*](#)

\* Note: A transactional charge will be incurred for downloading an Official Patent or Patent Family Report. Your acceptance of this charge occurs in a later step in your session. The transactional charge for downloading is outside of customer subscriptions; it is not included in any flat rate packages.

[Link to Claims Section](#)

May 11, 1999

Use of carbazole compounds for the treatment of congestive heart failure

**APPL-NO:** 875603 (08)

**FILED-DATE:** December 29, 1997

**GRANTED-DATE:** May 11, 1999


**ASSIGNEE-AT-ISSUE:** Boehringer Mannheim Pharmaceuticals Corporation Smith Kline Corporation Limited Partnership No. 1, Gaithersburg, Maryland, United States (US), 02

**ASSIGNEE-AFTER-ISSUE:** December 29, 1997 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., BOEHRINGER MANNHEIM PHARMACEUTICALS CORPORATION SMITH KLINE BEECHAM CORPORATION LIMITED PARTNERSHIP 1 101 ORCHARD RIDGE DRIVE GAITHERSBURG MARYLAND 20878, Reel and Frame Number: 09065/0783

September 10, 2003 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., ROCHE THERAPEUTICS, INC. 340 KINGSLAND STREET NUTLEY NEW JERSEY 07110, Reel and Frame Number: 13957/0660

September 16, 2003 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., SB PHARMCO PUERTO RICO INC. 105 PONCE DE LEON AVENUE HATO REY 00917 PUERTO RICO, Reel and Frame Number: 13974/0463

**CORE TERMS:** patient, compound, carvedilol, dose, sub, mortality, cardiac, dosage, diuretic, inhibitor ...

Source: [Legal](#) > [Area of Law - By Topic](#) > [Patent Law](#) > [Patents](#) > [U.S. Patents](#) > [Utility, Design and Plant Patents](#) 

Terms: **patno=5902821** ([Edit Search](#))

View: **Custom**

Segments: Assignee, Cert-correction, Reexam-cert, Reexam-litigate

Date/Time: Wednesday, April 20, 2005 - 3:56 PM EDT

[About LexisNexis](#) | [Terms and Conditions](#)

[Copyright ©](#) 2005 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.

Spivack 5,902,821 4/20/05

109C25

Print Request: All Documents

Time of Request: April 20, 2005 03:57 PM EDT

Number of Lines: 31

Job Number: 1841:41401997

Client ID/Project Name:

Research Information:

Utility, Design and Plant Patents  
patno=5902821

Send to: ARNOLD, DEIRDRE  
PATENT & TRADEMARK OFFICE  
MADISON BLDG WEST  
600 DULANY ST RM 1C09  
ALEXANDRIA, VA 22314

1 of 1 DOCUMENT

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

5902821

[Link to Claims Section](#)

May 11, 1999

Use of carbazole compounds for the treatment of congestive heart failure

**APPL-NO:** 875603 (08)

**FILED-DATE:** December 29, 1997

**GRANTED-DATE:** May 11, 1999

**ASSIGNEE-AT-ISSUE:** Boehringer Mannheim Pharmaceuticals Corporation Smith Kline Corporation Limited Partnership No. 1, Gaithersburg, Maryland, United States (US), 02

**ASSIGNEE-AFTER-ISSUE:** December 29, 1997 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., BOEHRINGER MANNHEIM PHARMACEUTICALS CORPORATION SMITH KLINE BEECHAM CORPORATION LIMITED PARTNERSHIP 1 101 ORCHARD RIDGE DRIVE GAITHERSBURG MARYLAND 20878, Reel and Frame Number: 09065/0783

September 10, 2003 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., ROCHE THERAPEUTICS, INC. 340 KINGSLAND STREET NUTLEY NEW JERSEY 07110, Reel and Frame Number: 13957/0660

September 16, 2003 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., SB PHARMCO PUERTO RICO INC. 105 PONCE DE LEON AVENUE HATO REY 00917 PUERTO RICO, Reel and Frame Number: 13974/0463



109C25

\*\*\*\*\* Print Completed \*\*\*\*\*

Time of Request: April 20, 2005 03:57 PM EDT

Print Number: 1841:41401997

Number of Lines: 31

Number of Pages:

Send To: ARNOLD, DEIRDRE  
PATENT & TRADEMARK OFFICE  
MADISON BLDG WEST  
600 DULANY ST RM 1C09  
ALEXANDRIA, VA 22314

Spivack 5,902,821 21/04/2005

(C) QUESTEL 1994  
QUESTEL.ORBIT (TM) 1998 21/04/05 13\*47\*25  
Last connection: 15/04/05 14\*59\*45

WELCOME to QUESTEL.ORBIT- Your Guide to INTELLECTUAL PROPERTY  
www.questel.orbit.com - Gateway, documentation & IP resource  
- Times of operation of Questel.Orbit service, see INFO HOURS  
- Enhanced SDI Email Delivery with Links to Download Results  
- New Export Feature: improved offline options - INFO EXPORT  
- PatentExaminer portfolio manager available - INFO PATEXAM  
- 2005 Euro and US Dollar price lists available from website  
- Research Disclosure file now available - enter: INFO RDISC  
- \*FAMPAT worldwide family file released. Details on website  
..FILE / ..INFO / ..GUIDE

Query/Command : file pluspat

Selected file: PLUSPAT

PLUSPAT - (c) Questel-Orbit, All Rights Reserved.  
Comprehensive Worldwide Patents database  
New Patent Citation Commands & FAM Citation Report - see INFO PATCITE  
Announcing enhanced searchability of Relevancy Codes in Search Reports  
for EP, WO and FR patents. For more details see below and on QO website  
-To retrieve set of high relevancy X coded cited patents, use xctx=yes  
-To extract cited patents with only high relevancy code, use mem/xctx  
Last update of file: 2005/04/20 (YYYY/MM/DD) 2005-15/UP (last update)

Search statement 1

Query/Command : us5902821/pn

\*\* SS 1: Results 1

Search statement 2

Query/Command : PRT SS 1 MAX 1 LEGALALL

1 / 1 PLUSPAT - @QUESTEL-ORBIT

**Patent Number :**

US5902821 A 19990511 [US5902821]

**Title :**

(A) Use of carbazole compounds for the treatment of congestive heart failure

**Patent Assignee :**

(A) BOEHRINGER MANNHEIM PHARM CORP (US)

**Patent Assignee :**

Boehringer Mannheim Pharmaceuticals Corporation Smith Kline Corporation  
Limited Partnership No. 1, Gaithersburg MD [US]

**Inventor(s) :**

(A) SPONER GISEBERT (DE); STREIN KLAUS (DE); LUKAS-LASKEY MARY ANN  
(US); RUFFOLO JR ROBERT (US); SHUSTERMAN NEIL (US)

**Application Nbr :**

US87560397 19971229 [1997US-0875603]

**Filing Details :**

PCT/EP96/00498 19960207 [1996WO-EP00498]  
WO96/24348 19960815 [WO9624348]

**Priority Details :**

DE19503995 19950208 [1995DE-1003995]  
WOEP9600498 19960207 [1996WO-EP00498]

**Intl Patent Class :**

(A) A61K-031/40

**EPO ECLA Class :**

A61K-031/403

**US Patent Class :**

ORIGINAL (O) : 514411000

**Document Type :**

Corresponding document

**Citations :**

US4888179; US5308862; US5312828

J. of Cardiovascular Pharm; Senior, et al., "Effects of Carvedilol on  
Ventricular Arrhythmias", 1992, vol. 19, (Supp. 1): pp. S117-S121.

J. of Cardiovascular Pharm; DasGupta, et al., "The Effects of  
Intravenous Carvedilol, A New Multiple Action Vasodilatory  
.beta.-Blocker, in Congestive Heart Failure", 1991, vol. 18, (Suppl. 1):  
pp. S12-S16.

American J. of Cardiology; DasGupta, et al., "Value of Carvedilol in  
Congestive Heart Failure Secondary to Coronary Artery Disease", 1990,  
vol. 66, pp. 1118-1123.

Z. Kardiol; A. Buchwald, et al., "Acute Hemodynamic Effects of the  
Beta-blocker Carvedilol in Heart Failure", 1990, vol. 79, No. 6, pp.  
424-428.

JACC; DiLenarda, et al., "Acute Hemodynamic Effects of Carvedilol Versus  
Metoprolol In Idiopathic Dilated Cardiomyopathy", 1991, vol. 17, No.  
2, Abstract 142A.

Frontiers in CHF; D. Tepper, "Multicenter Oral Carvedilol Heart Failure  
Assessment", 1996, vol. 2, No. 1, pp. 39-40.

J. of Cardiovascular Pharm; DasGupta, et al., 1992, vol. 19, (Suppl. 1):  
pp. S62-S67.

J. of Hypertension; C. Rosendorff, "Beta-blocking agents with  
vasodilator activity", 1993, vol. 11, (Suppl. 4): pp. S37-S40.

Cardiology; J. Lessem, et al., "Development of a Multi-action  
Beta-blocker", 1993, vol. 82, (Suppl. 3): pp. 50-58.

Drug Safety; W.J. Louis, et al., "A Risk-Benefit Assessment of Carvedilol in the Treatment of Cardiovascular Disorders", 1994, vol. 11, No. 2, pp. 86-93.

1994 American Heart Association, Inc., "A Randomized Trial of .beta.-Blockade in Heart Failure", Circulation 90(4), Oct. 1994, pp. 1765-1773.

Waagstein et al., The Lancet, vol. 342, Dec. 11, 1993, "Beneficial effects of metoprolol in idiopathic dilated cardiomyopathy", pp. 1441-1446.

Ruffolo et al., Cardiology 1993; 82(suppl 3):24-28, "Cardioprotective Potential of Carvedilol", pp. 24-28.

Feuerstein et al., Journal of Hypertension 1993, vol. 11(suppl 4)., "Myocardial protection by the novel vasodilating beta-blocker, carvedilol; potential relevance of anti-oxidant activity".

Feuerstein et al., Journal of Cardiovascular Pharmacology, 19(suppl. 1) S138-141, "Myocardial Protection with Carvedilol"(1992).

DiBianco et al., The New England Journal of Medicine, vol. 320, Mar. 16, 1989, No. 11, "A comparison of oral milrinone, digoxin, and their combination in the treatment of patients . . . ", pp. 677-678.

Cohn et al., The New England Journal of Medicine, vol. 313, No. 24, "Effect of vasodilator therapy on mortality in chronic congestive heart failure", Jun., 1986, pp. 1547-1552.

McTavish et al., Drugs, 45(2): 232-258, 1993, "Carvedilol, A review of its pharmacodynamic and pharmacokinetic properties, and therapeutic efficacy".

Drugs; McTavish, et al., "Carvedilol--A Review of its Pharmacodynamic and Pharmacokinetic Properties, and Therapeutic Efficacy", 1993, vol. 45, No. 2, pp. 232-258.

Circulation; H. Krum, et al., "Effects of Carvedilol, a Vasodilator-.beta.-Blocker, in Patients with Congestive Heart Failure Due to Ischemic Heart Disease", 1995, vol. 92, No. 2, pp. 212-218.

CBS-TV; CBS Evening News, Transcript, Jan. 27, 1993, 6:30-7:00pm.

CNBC; Steals and Deals, Transcript, Jan. 29, 1993, 8:30pm.

Circulation; DasGupta, et al., 1989, vol. 80, No. 4, (Suppl. II): pp. 116-117.

Drugs of Today; Ruffolo, et al., "Carvedilol (Kredex): A Novel Multiple Action Cardiovascular Agent", 1991, vol. 27, No. 7, pp. 465-492.

**Publication Stage :**

(A) United States patent

**Abstract :**

PCT No. PCT/EP96/00498 Sec. 371 Date Dec. 29, 1997 Sec. 102(e) Date Dec. 29, 1997 PCT Filed Feb. 7, 1996 PCT Pub. No. WO96/24348 PCT Pub. Date Aug. 15, 1996A method of treatment using carvedilol is disclosed, wherein the carvedilol decreases the mortality caused by congestive heart failure in patients. The patients are titrated with low amounts of carvedilol, with the initial titration dosage being only 10 to 30% of the daily maintenance dose.

1 / 1 LGST - @EPO

**Patent Number :**

US5902821 A 19990511 [US5902821]

**Application Number :**

US87560397 19971229 [1997US-0875603]

**Action Taken :**

19971229 US/AS02-A

ASSIGNMENT OF ASSIGNOR'S INTEREST

OWNER: BOEHRINGER MANNHEIM PHARMACEUTICALS CORPORATION SM; EFFECTIVE  
DATE: 19971203

19971229 US/AS02-A

ASSIGNMENT OF ASSIGNOR'S INTEREST

OWNER: LUKAS-LASKEY, MARY ANN; EFFECTIVE DATE: 19971203

19971229 US/AS02-A

ASSIGNMENT OF ASSIGNOR'S INTEREST

OWNER: RUFFOLO, ROBERT, JR.; EFFECTIVE DATE: 19971201

19971229 US/AS02-A

ASSIGNMENT OF ASSIGNOR'S INTEREST

OWNER: SSHUSTERMAN, NEIL; EFFECTIVE DATE: 19971201

19971229 US/AS02-A

ASSIGNMENT OF ASSIGNOR'S INTEREST

OWNER: SPONER, GISB; EFFECTIVE DATE: 19971201

20030910 US/AS-A

ASSIGNMENT

OWNER: ROCHE THERAPEUTICS, INC. 340 KINGSLAND STREETNUTLE  
ASSIGNMENT OF ASSIGNORS INTEREST;ASSIGNORS:BOEHRINGER MANNHEIM  
PHARMACEUTICALS CORPORATION;SMITHKLINE BECKMAN  
CORPORATION;REEL/FRAME:013957/0660;SIGNING DATES FROM 20001212 TO  
20001221

20030916 US/AS-A

ASSIGNMENT

OWNER: SB PHARMCO PUERTO RICO INC. 105 PONCE DE LEON AVEN; EFFECTIVE  
DATE: 20030801  
ASSIGNMENT OF ASSIGNORS INTEREST;ASSIGNOR:ROCHE THERAPEUTICS  
INC.;REEL/FRAME:013974/0463

20040928 US/RF-A

REISSUE APPLICATION FILED

EFFECTIVE DATE: 20031125

**Update Code :**

2005-11

1 / 1 CRXX - @CLAIMS/RRX

**Patent Number :**

5,902,821 A 19990511 [US5902821]

**Patent Assignee :**

Boehringer Mannheim Pharmaceuticals Corp - SmithKline Beecham L P

**Actions :**

20030910 REASSIGNED

ASSIGNMENT OF ASSIGNORS INTEREST

Assignor: BOEHRINGER MANNHEIM PHARMACEUTICALS CORPORATION DATE SIGNED:  
12/12/2000

SMITHKLINE BECKMAN CORPORATION DATE SIGNED: 12/21/2000

Assignee: ROCHE THERAPEUTICS, INC. 340 KINGSLAND STREET NUTLEY NEW  
JERSEY 07110

Reel 013957/Frame 0660

Contact: GLAXOSMITHKLINE MARY E. MCCARTHY P.O. BOX 1539 KING OF PRUSSIA,  
PA 19406-0939

20030916 REASSIGNED  
ASSIGNMENT OF ASSIGNORS INTEREST

Assignor: ROCHE THERAPEUTICS INC. DATE SIGNED: 08/01/2003

Assignee: SB PHARMCO PUERTO RICO INC. 105 PONCE DE LEON AVENUE HATO REY  
PUERTO RICO 00917

Reel 013974/Frame 0463

Contact: GLAXOSMITHKLINE MARY E. MCCARTHY P.O. BOX 1539 KING OF  
PRUSSIA, PA 19406-0939

20031125 REISSUE REQUESTED  
ISSUE DATE OF O.G.: 20040928  
REISSUE REQUEST NUMBER: 10/721022  
EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 1614

Reissue Patent Number:

Search statement 2

Query/Command : st

Session finished: 21 APR 2005 Time 13:49:17

QUESTEL.ORBIT thanks you. Hope to hear from you again soon.

LexisNexis CourtLink

Welcome Deirdre Arnold!

[Order Documents](#) | [Available Courts](#) | [Lexis.com](#) | [Sign Out](#) | [Help](#)

[My Courtlink](#) | [Search](#) | [Dockets & Documents](#) | [Track](#) | [Alert](#) | [Strategic Profiles](#) | [My Account](#)

[Search > Patent Search > Searching](#)

Patent Search - Number: 5,902,821

+

No cases containing this patent number were found.

[Return to Search](#)

(Charges for search still apply)

[Pricing](#) | [Privacy](#) | [Master Services Agreement](#)

Copyright © 2005 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.